

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Lining for a vehicle roof (2) with:
an air-permeable support layer (3),
an air-permeable first reinforcement layer (4) on a vehicle roof side of said support layer,
and an air-permeable second reinforcement layer (5) on a passenger compartment side of said support layer,
an air-impermeable back layer (9) on a vehicle roof side of said first reinforcement layer,
an air-permeable decorative layer (6) on a passenger compartment side of said second reinforcement layer, and
the back, first reinforcement, support, second reinforcement, and decorative layers being bonded to each other with an air-permeable adhesive (7),
and further comprising a semi-permeable and migration-resistant barrier layer (8) provided between the second reinforcement layer (5) and the decorative layer (6) to make an acoustically optimisable and aesthetically-resistant vehicle rooflining,
wherein the layers on the passenger compartment side have an air flow resistance of $500\text{Nsm}^{-3} < R1 < 2500\text{Nsm}^{-3}$, and selected to optimize an acoustic effectiveness of the lining by selecting the air flow resistance so as to provide sound absorption coefficients which are sufficient to provide sound absorption at a predetermined low frequency while providing sound absorption coefficients at higher frequencies sufficiently low as to facilitate intelligibility of speech in the passenger compartment when combined with the sound absorption at the predetermined low frequency.

2. (canceled)

3. (previously presented) Lining according to claim 1, wherein the air-permeable support layer (3) is made from a polyurethane foam.

4. (previously presented) Lining according to claim 1, wherein the first reinforcement layer (4) comprises a glass fibre layer.

5. (previously presented) Lining according to claim 1, wherein the barrier layer (8) comprises a mixed fibre fabric weighing approximately 20 g/m² to 60 g/m².

6. (previously presented) Lining according to Claim 5, wherein the barrier layer (8) comprises cellulose and polyester fibres bonded together.

7. (previously presented) Lining according to Claim 6, wherein a surface of the barrier layer is treated or wetted so that said treated or wetted surface can enter into adhesion with said adhesive.

8. (previously presented) Lining according to Claim 1, wherein the barrier layer (8) is migration-resistant to softeners, decomposition products used by ageing and / or additives from a polyurethane foam layer or adhesive films.

9. (previously presented) Lining according to Claim 1, wherein the barrier layer (8) has a thickness of 0.2 mm to 1.0 mm.

10. (previously presented) Lining according to Claim 1, wherein the adhesive (7) is a conventional two-pack polyurethane adhesive.

11. (previously presented) Lining according to Claim 1, wherein the decorative layer (6) is an air-permeable polyethylene non-woven fabric layer.

12. (currently amended) Method for making a vehicle rooflining with:
an air-permeable support layer (3),
an air-permeable first reinforcement layer (4) on a vehicle roof side of said support layer,
and an air-permeable second reinforcement layer (5) on a passenger compartment side of said support layer,
an air-impermeable back layer (9) on a vehicle roof side of said first reinforcement layer,
an air-permeable decorative layer (6) on a passenger compartment side of said second reinforcement layer, and
the back, first reinforcement, support, second reinforcement, and decorative layers being bonded to each other with an air-permeable adhesive (7),
and further comprising a semi-permeable and migration-resistant barrier layer (8) provided between the second reinforcement layer (5) and the decorative layer (6) to make an acoustically optimisable and aesthetically-resistant vehicle rooflining, said method comprising:
providing an air-impermeable back layer (9);
covering said back layer with first reinforcement fibres (11);
applying a support layer (3), to the reinforcement fibres (11);
impregnating the back layer (9), reinforcement fibres (11) and support layer (3) jointly with a pre-determined quantity of a first component (12) of an adhesive (7) by transporting the back layer, reinforcement fibres and support layer together through a bath (13) filled with this first component (12) and then squeezing through first squeezing rollers (14) disposed downline from the bath;

covering the thus impregnated support layer on a side thereof opposite the back layer with second reinforcement fibres (15); wetting the second reinforcement fibres with a second component (16) of the adhesive (7);

applying a semi-permeable and migration-resistant barrier layer (8) to the second reinforcement fibres (15) and then pressing the layers with second squeezing rollers (17), in order to allow the two adhesive components (12, 16) to react with each other and thereafter applying a decorative layer (6) to the barrier layer (8) such that the layers on the passenger compartment side have an air flow resistance of $500\text{Nsm}^{-3} < R1 < 2500\text{Nsm}^{-3}$, optimizing an acoustic effectiveness of the lining by selecting the air flow resistance so as to provide sound absorption coefficients which are sufficient to provide sound absorption at a predetermined low frequency while providing sound absorption coefficients at higher frequencies sufficiently low as to facilitate intelligibility of speech in the passenger compartment when combined with the sound absorption at the predetermined low frequency.

13. (previously presented) The method according to claim 12 further comprising cutting to size and hot shaping.

14. (previously presented) The method according to claim 12 wherein said decorative layer is self adhesive.

15. (previously presented) The method according to claim 12 wherein said first reinforcement fibres comprise glass fibres.

16. (previously presented) The method according to claim 12 wherein said support layer comprises a polyurethane foam layer.

17. (previously presented) The method according to claim 12 wherein said second reinforcement fibres comprise glass fibres.

18. (previously presented) The method according to claim 12 wherein said step of wetting comprises spraying.

19. (previously presented) Lining according to claim 1, wherein the layers on the passenger compartment side have an air flow resistance of $900 \text{ Nms}^{-3} < R1 < 1900 \text{ Nsm}^{-3}$.

20. (previously presented) Lining according to claim 5, wherein the barrier layer (8) comprises a mixed fibre fabric, weighing approximately 45 g/m^2 .

21. (previously presented) Lining according to Claim 9, wherein the barrier layer (8) has a thickness of 0.285 mm.